REMARKS

In the Office Action mailed December 31, 2003, the Examiner rejected Claims 1-64. The foregoing amendments amends claims 1, 8, 9, 12, 18, 19, 33, 40, 41, 44, 50 and 51 and cancels claims 22-31 and 54-63.

The Examiner rejected Claims 1-64 primarily relying upon U.S. Patent No. 6,006,264 to *Colby et al.* (*"Colby"*). *Colby* describes content-based routing.

> [T]he invention features content-aware flow switching in an IP network. Specifically, when a client in an IP network makes a content request, the request is intercepted by a content-aware flow switch, which seamlessly forwards the content request to a server that is well-suited to serve the content request. The server is chosen by the flow switch based on the type of content requested, the QoS requirements implied by the content request, the degree of load on available servers, network congestion information, and the proximity of the client to available servers.

Column 2, lines 47-59. *Colby* describes that a server is selected based on the content requested and the proximity of the client to the server. For example, servers that are located in the same location, such as the same continent, as the client are preferred. Column 3, lines 15-21.

The system maintains a Content Server Database (CSD) that maintains information about content flow characteristics, content locality and the location and load of the servers. The CSD includes content records that contain information about specific content and server records that contain information about specific servers. Column 6, lines 42-63. If the servers listed in the CSD cannot satisfy a content request, then the request is redirected to a remote server, the client TCP request is spoofed or the request is rejected. Column 8, lines 56-67.

Colby Does Not Consider the Proximity of Other Clients

Independent claims 1, 12, 33 and 44 require routing a content request to a content server based on one or more cost measurements that measure operational characteristics of the network between the requesting client and the content servers. If cost measurements are not available for the requesting client, then the content request is routed based on cost measurements between a client that is physically proximate to the requesting client and the content servers.

Colby does not describe routing a content request using cost measurements for a client that is physically proximate to the requesting client. *Colby* only considers the location of the servers relative to the requesting client. *Colby* does not consider the locations of other clients. The Examiner cited the Internet Proximity Assist (IPA) module of *Colby* and alleged that the IPA determines servers that are closest to the client. The IAP module only determines the server that is closest to the requesting client. The IAP does not determine other clients that are proximate to the requesting client. *Colby* considers the proximity of the requesting client and the servers, rather than the proximity of the requesting client and other clients, as required by the claimed invention.

Colby teaches away from the claimed invention because *Colby* describes that if the CSD does not contain information about the requested content, then the request is handled outside the system (redirected to a remote server, spoofed or rejected). In contrast, if information related to the requesting client is not available, then the claimed invention uses information related to a proximate client to route the request. Thus, *Colby* does not anticipate claims 1, 12, 33 and 44.

Independent claims 32 and 64 and dependent claims 11, 21, 43 and 53 require computing a weighted average of latency measurements as a function of the distances between a plurality of network clients and an inferable or network client, wherein the weighted average comprises an estimate of the latency between the network server and the client. *Colby* does not describe measuring the distances between clients or using the distances to infer operational characteristics. *Colby* only considers the distances between

the requesting client and the servers. Thus, *Colby* does not anticipate claims 11, 21, 32, 43, 53 and 64.

Dependent claims 10, 20, 42 and 52 require determining a weighted average of network performances between a content server and a number of clients proximate to the network client to infer performance between the content server and the network client. *Colby* does not consider the location of other clients relative to the requesting client and does not describe using the network performance between a server and another client to determine routing for a requesting client. *Colby* only describes inferring the QoS requirements for a request based on the content requested. *Colby* does not describe inferring performance based on the performance of proximate clients. Thus, *Colby* does not anticipate claims 10, 20, 42 and 52.

Colby and *Jang* Do Not Describe, Teach or Suggest Determining a Location of a Network Client by Circular Intersection

Claims 8, 9, 18, 19, 40, 41, 50 and 51 require determining the location of the requesting client via circular intersection. Although *Colby* describes determining the location of the requesting client, *Colby* determines the location of the requesting client by identifying the continent where the client resides or the ISP associated with the client. Column 3, lines 12-28. *Colby* does not describe using circular intersection to determine the location of the client. The Examiner alleged that U.S. Patent No. 6,526,283 to *Jang* ("*Jang*") describes circular intersection and that it would have been obvious to combine *Colby* and *Jang*. There is no motivation to combine *Colby* and *Jang* in the manner suggested by the Examiner. *Colby* is directed to routing in a computer network based on the requested content, whereas *Jang* is directed to determining the location of a mobile phone in a cellular network. There is no suggestion in *Colby* that the requesting client is mobile or that the location of the requesting client may change.

Colby does not require the same granularity of location resolution required by *Jang*. *Colby* only describes determining the continent where the client is located,

whereas *Jang* describes determining the location of a mobile phone relative to a number of base stations. Moreover, there is no suggestion that the system described in *Colby* would benefit from the location determination method described by *Jang*. In particular, there is no explanation of how the more detailed location information provided by *Jang* could be used by the system described by *Colby*.

CONCLUSION

It is believed that the foregoing amendments and cancellations place the application in condition for allowance and a notice of allowance is respectfully requested. If there are any issues that can be resolved via a telephone conference, the Examiner is invited to contact the undersigned at 404-815-6483.

Respectfully submitted,

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